



**Water Committee Meeting
19 September 2017**

Agenda

- Current water usage
- Source of water
- Water purification
- Reduce demand
- Prioritise Actions

Attendees

Attendees	Wants to be a committee member	Attendees	Wants to be a committee member
Elizabeth Bender		Elaine Harris	X
Etlon Gunter	X	Rikus Neethling	
Francois Carstens		Awie Papenfus	X
Gert Nagel	X	Ben van Zyl	X
Riaan van Eck		Helen Krouse	X
Tobie Esterhuyzen		Grant Hatch	
Rob Watson	X	Leo Bender	X
Nick Hunt		Christo Opperman	
Niel Loedolff	X	Niel Morrison	

Current water usage

Items	Water	Comment
Vineyard– 9 hectares	27 000 cubic metres Nov - April	
Landscape – 9 hectares	30 000 cubic metres Oct – April -	Challenge which requires alternative water source
Winemaking	Approx. 15L Water per 1L Wine (using municipal water source only)	
3 Dams	30 000 cubic metres	Increase capacity

* See attached graphs carried out by Riaan van Eck previously – thanks Riaan

Source of water

- 1 every 14 days water from Eerste River – in future unreliable and not sustainable
- New Borehole – 5000 litres per hour, however a problem with the quality of borehole
- Deepen dam & increase pond sizes – Practical action
- Pipes to capture water outside the estate using storm water drains- Happens currently
- Buy water from dam opposite estate - Explore
- Capture water into reservoir – investigate
- Get water from the Olive Estate -- investigate
- Utilise Olive Estate Dam Water (Shared Services)
- Effluent water from Macassar
- New borehole in granite (good quality water)
- Reduce evaporation
- Lifestyle gutters & reservoir

Water purification

- Borehole ➤ Reservoir (treatment plant) ➤ Irrigation
- Proper wetland (gabion & weirs)
- Water purification system
- Treatment plant for wine water effluent

Reduce demand

- Put down bark chips in vineyards and landscape
- Set up compost heap to use on landscape
- Use different irrigation system
- Water wise landscape plants
- Use more gravel and stones for landscaping
- Planting Aquarius Lane take into an appropriate, irrigation and mulch plan
- Investigate using stock absorb water retention products

Tactical / Short Term

- Use existing borehole water to manually water the landscape (Ben)
- Investigate New Borehole. Source information from Stellenbosch University (Etlon)
- Kelderhof (Tobie)
- Connect storm water / Berm water ditch run-off to dam / Below houses. Clean out storm water drains (Awie, Leo)
- Seal bottom dam wall overflow (Ben, Rob)
- Buy water from Kelderhof (Tobie)
- Investigate and user water retention products for landscaping (Helen)

Long Term actions

- Purchase TLB / Costing (Dam cleaning, General) (Leo, Awie, Gert)
- Effluent source (Tobie, Elaine)
- Wetland (Helen)
- Aquarius irrigation (Helen, Niel)
- Reservoir/Tanks (Helen)
- Processing of borehole water



CROYDON
Vineyard Estate